

## CHAPTER 9: RSTIS COMPLETION AND FUTURE STEPS

### SCAG Letter of Completion

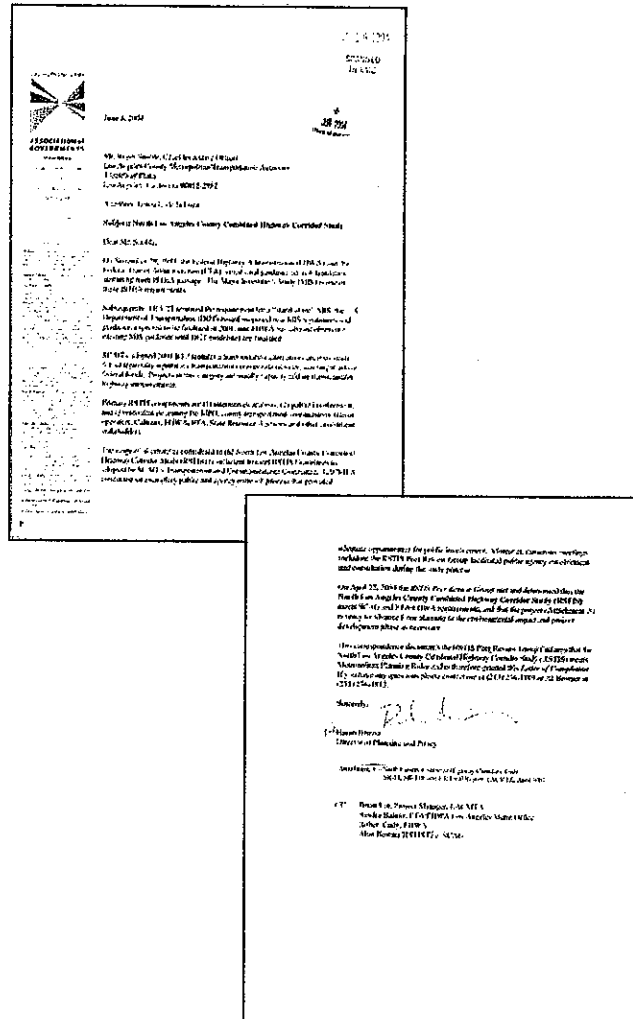
The SCAG RSTIS Peer Review Group has been continually updated on the process, progress, issues, and resolutions of the North County Corridor RSTIS. On June 3, 2004, the RSTIS Peer Review Group agreed that the letter of completion (Exhibit 9.1) should be issued and should include recommended short-range improvements within the I-5, SR-14, and SR-138:

- I-5 HOV lanes from SR-14 to SR-126 West;
- I-5 truck lanes from SR-14 to Calgrove Avenue;
- I-5 right-of-way protection from SR-14 to the Kern County Line;
- SR-14 reversible HOV/transit lanes from I-5 to Avenue P;
- SR-14 mixed flow lanes (elimination of lane drops) from Sand Canyon to Avenue P;
- SR-14 right-of-way protection from I-5 to the Kern County Line;
- I-5/SR-14 corridor Metrolink and express bus service increased by 50 percent over No Build;
- SR-138 widening to four lanes from Pearblossom to the San Bernardino County line;
- High Desert Corridor right-of-way preservation from I-5 to I-15; and
- SR-138 corridor express bus service increased by 50 percent over No Build.

Prior to issuing the letter of completion, the group reviewed the April 2004 *North County Corridors Pre-Final Report* and provided comments. Those comments have been incorporated herein.

Attached as part of the Letter of Completion for the full project is a list of agencies jurisdictions and organizations that have sent letters of support or comment letters to the MTA. (Exhibit 9.2).

Exhibit 9.1: SCAG Letter of Completion



### SCAG Regional Transportation Plan

The long-range Regional Transportation Plan (RTP) and short-range Regional Transportation Improvement Program (RTIP) are updated by SCAG biennially. With completion of the North County Corridors Plan, the next RTP and RTIP (2006) will need to be revised to incorporate recommendations from this plan document.

The RSTIS process has identified several regional planning issues that directly impact North County and will need refinement/coordination in future planning updates:

Exhibit 9.2: List of Letters of Support or Comment Endorsing the North County Corridors Plan

• North County Transportation Coalition	• San Bernardino Associated Governments
• Supervisor Michael D. Antonovich	• Automobile Club of Southern California
• City of Lancaster	• City of Palmdale
• City of Santa Clarita	• Antelope Valley Board of Trade
• Los Angeles World Airports, City of Los Angeles	• Llano Community Association
• I-5 Golden State Gateway Coalition	• Town of Littlerock
• Santa Clarita Valley Chamber of Commerce	• Quartz Hills Town Council
• Valencia Industrial Association	

- **High Speed Transit in North County—** SCAG's current plan calls for a privatized Maglev system linking Palmdale Airport with Los Angeles World Airport, Orange County and Ontario Airport. Meanwhile the California High Speed Rail Authority (HSR) envisions similar service linking downtown Los Angeles with North County (either I-5 or SR-14 corridors), the Central Valley, the Bay Area, and Sacramento. The financial feasibility of the Maglev and HSR proposals has not yet been demonstrated. Regional travel forecasts indicate a need for greater passenger carrying capacity in the L.A. to Palmdale (I-5 to SR-14) corridor than can be provided by highway, Metrolink and express bus improvements within the North County Corridors Plan. A high speed transit linkage from the Antelope Valley to Sylmar and downtown LA will be of particular benefit to North County. Linkages north along I-5 via the Grapevine, southwest to Los Angeles World Airport, and east to the Victor Valley appear less advantageous to North County.

- **Jobs/Housing Balance in the Antelope Valley—** SCAG's 2030 regional forecasts indicate demand for housing in Antelope Valley will far outstrip new jobs created locally. The imbalance, fueled by disparity between relatively inexpensive Antelope Valley housing and escalating housing costs in the LA Basin, is expected to generate a threefold increase in SR-14 corridor travel demand. Meanwhile, the costs of providing the highway and transit infrastructure to accommodate the 40+ mile commute is disproportional high, compared to costs of accommodating a similar population increase within the Basin or other locations where the

number of jobs and housing supply are in relative balance (approximately 1 job per household). A regional mechanism is envisioned to insure a greater match between jobs, housing and transportation investment (i.e., constrain new housing in concert with new job creation and transportation capacity increases). Other cities and counties in California, confronted by similar infrastructure constraints, have chosen to ration new housing permits in an annual competition. To work effectively, Palmdale, Lancaster, and the County would need to act in concert through intergovernmental agreement, based upon the latest job and traffic counts and expected delivery of new transportation capacity (RTIP).

### MTA Planning

The Los Angeles County Metropolitan Transportation Authority (MTA) is responsible for short- and long-range transportation planning for Los Angeles County. Over the past two years, the MTA has identified seven priority corridors through its Mobility 21 forum. A countywide short-range transportation planning process has also been initiated by MTA in cooperation with local jurisdictions.

Once the recommendations from the North County Combined Highway Corridors Study have been adopted by the MTA Board, the elements of the plan will be considered for inclusion in the next updates of the Short Range and Long Range Transportation Plans for Los Angeles County.

## Preliminary Engineering and Design

The North County Corridors Plan identifies the design concept and scope of the transportation improvements to address transportation needs of North County. The next step in the project development process involves the preparation of a Project Study Report/Project Development Support (PSR/PDS) for the various short-range and long-range components of the plan. The PSR/PDS, an official Caltrans programming document, has already been prepared for three components of the short-range plan, allowing these projects to advance toward project approval and environmental clearance, once funding can be assured (Exhibit 9.3). Following project approval and environmental clearance, the project will enter final design and construction phase.

- I-5 short-range improvements—HOV lane extension from SR-14 to SR-126 West and truck lane extension from SR-14 to Calgrove Avenue. Options to be studied prior to approval are constrained (non-standard geometry), standard (including CHP area), and full build-out (including future widening), and no-build alternatives.
- SR-14 short-range improvements—elimination of lane drops with continuous 3 mixed flow lanes and one HOV lane in each direction between Sand Canyon and Avenue P. Options to be studied prior to approval are constrained (non-standard geometrics to minimize right-of-way impacts, while attaining optimum safety and operation), standard geometry (including CHP area), and full build-out (including widening to ultimate dimensions), and no-build alternatives. For the 2003 MTA Call for Projects the PSR/PDS that was approved for environmental review and preliminary design provide for 3 continuous mix flow lanes and one HOV lane and did not include the 2-3 reversible lanes between the I-5/SR-14 Interchange and Avenue P. The evaluation of the reversible lanes is proposed for inclusion as part of the subsequent PAED effort. A PSR/PDS update and a PEAR budget increase may be needed to address the modifications.

- SR-138 widening from Pearblossom to San Bernardino County Line. This project has completed project approval, and environmental clearance and is awaiting full funding for final design and construction.

Two additional PSR/PDS efforts are anticipated to facilitate implementation of North County short-range improvements:

- SR-14 two/three reversible HOV/transit lanes between I-5 and Avenue P. This will supplement and be integrated with the previously prepared PSR/PDS for lane drops between Sand Canyon to Avenue P. Options to be studied include two reversible lanes constrained (non-standard geometrics), two reversible lanes standard, three reversible lanes constrained, three reversible lanes standard, and alternative access control ramp configurations.

In a memo from Caltrans to MTA (see Exhibit 9.4), Caltrans has expressed that they are receptive to the planning concepts involving the reversible high occupancy vehicle lanes. However, because the RSTIS process is a high level planning study, Caltrans will defer final approval until further detail analysis is conducted during subsequent phases. Some of the questions or comments that will need to be resolved during the subsequent phases include the following:

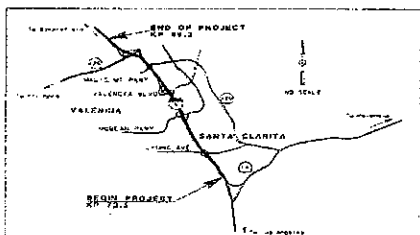
1. Have traffic characteristics of the SR -14 remained conducive to 2 or more reversible HOV lanes? If so, for how long is this directional split projected to exist and does it warrant the cost of reversing lanes each day, after completion of the re-construction?
2. The HOV facility on SR-14 would have to be modified significantly to accommodate reversible HOV lanes. Currently, there is water-carrying barrier in the median. If the facility is to be configured similarly to San Diego's 1-15 reversible lanes, all center median barriers, overhead HOV signing, and any bridge columns would have to be relocated. Also, the drainage would have to be accomplished in some other way than the current situation.

## Exhibit 9.3: PSR/PDS Documentation

07-LA-5-KP 73.5/89.2 (PM 45.7 + 55.4)  
07-136-23340K  
March 2003

### PROJECT STUDY REPORT- PROJECT DEVELOPMENT SUPPORT

This document can only be used to program the Engineering and Environmental Support for Project Approval and Environmental Document component. The remaining support and capital components of the project are preliminary estimates and are not suitable for programming purposes. Either a Supplemental PSR or a Project Report will serve as the programming document for the remaining support and capital components of the project.



I have reviewed the Right of Way information contained in this Project Study Report (Project Approval and Environmental Document component) and the Right of Way Data Sheet attached hereto, and find the data to be in conformance with State standards and practices.

*Wayne C. Harrold*  
WAYNE C. HARROLD, Acting R/W Project

On Route \_\_\_\_\_  
Between \_\_\_\_\_  
And \_\_\_\_\_

Submitted By:

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BRIAN LIN, PROJECT MANAGER (MTA)

Approval Recommended By:

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Concurred By:

*William H. Reagan*  
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Approved:

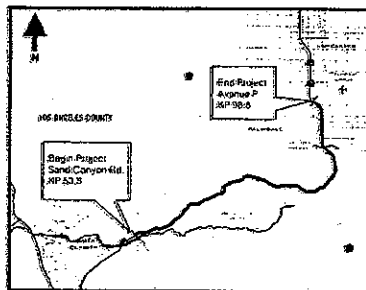
*Douglas R. Failing*  
DOUGLAS R. FAILING, DISTRICT DIRECTOR

### Corridor Improvement of State Route 14 between Sand Canyon Road and Avenue P

07-LA-14 KP 53.3/98.8 (PM 33.1/51.4)  
EA 23340K  
March 2003

### PROJECT STUDY REPORT (PROJECT DEVELOPMENT SUPPORT)

This document can be used to program only the Engineering and Environmental Support for Project Approval and Environmental Document component. The remaining support and capital components of the project are preliminary estimates and are not suitable for programming purposes. Either a Supplemental PSR or a Project Report will serve as the programming document for the remaining support and capital components of the project.



I have reviewed the Right of Way information contained in this Project Study Report (Project Development Support) and the Right of Way Data Sheet attached hereto, and find the data to be in conformance with current applicable State standards and practices.

*Wayne C. Harrold*  
WAYNE C. HARROLD, Acting R/W Project Delivery Manager

On Route \_\_\_\_\_  
Between \_\_\_\_\_  
And \_\_\_\_\_

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BRIAN LIN, LACMTA

APPROVAL RECOMMENDED BY:

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OSAMA M. AL-JALAL, Project Manager

CONCURRED BY:

*William H. Reagan*  
WILLIAM H. REAGAN, Deputy District Director, Division of Design

APPROVED:

*Douglas R. Failing*  
DOUGLAS R. FAILING, District Director

3-28-03  
DATE

3. Can full-shoulders be accommodated?  
The 1-15 has full 10-ft shoulders on either side of the two reversible lanes to provide a refuge area in the event that a bus becomes disabled and passengers need to be transferred to a relief bus.
4. What type of separation will be provided between HOV lanes and mixed flow lanes? The 1-15 is completely barrier separated in the median from the mixed-flow lanes on either side. The barrier reduces the risk of crashes due to outside vehicle intrusion and visa versa.
5. How will the entrances and exits be protected from wrong-way drivers and to avoid motorist confusion? Concerns vary depending upon which strategy will be pursued, e.g., single entrance and exit like the 1-15 or intermediate entrances and exits.
6. How will the direction of the HOV facility be reversed each day? Who will clear the facility? The District 11 TMC clears the 1-15 facility of any debris or disabled vehicles prior to changing the direction of the facility.
7. The SR-14 HOV facility currently operates on a part-time basis, with hours of southbound M-F 5 to 9 AM, and northbound M-F 3-7 PM. If reversible lanes are implemented prior to 2008, new hours would have to be determined, and all signing would have to be modified (part-time hours are supposed to end in the year 2008, at which time the HOV direct connectors at the 5/14 freeway interchange would be complete).
8. How would reversible HOV lanes feed into and out of the new 5/14 HOV direct connectors in 2008?
9. San Diego's 1-15 reversible HOV lanes are located on a separate alignment, which differs from the currently proposed SR-14 concept, so the 1-15 Freeway's operational studies should be reviewed and evaluated.

10. There were reversible HOV lanes in Texas in which the barrier is physically moved everyday with a machine, at significant daily operating costs. If this technique were to be considered for SR-14, a detailed analysis would be needed on the operational and maintenance costs.

*Exhibit 9.4: Memorandum from Caltrans to the MTA Regarding Reversible Lane Concepts*

<p>State of California Department of Transportation</p> <p><b>Memorandum</b></p> <p>To: Brian Lee, Project Manager Metropolitan Transportation Authority (MTA)</p> <p>From: LARRY TAYLOR, MANAGER CHIEF DEPARTMENT OF TRANSPORTATION OFFICE OF HIGHWAY ENGINEERING &amp; FEASIBILITY STUDIES (HENS/FHS) CORRIDOR &amp; FEASIBILITY STUDIES OVERSIGHT MANAGER</p> <p>Subject: Assessment of SR-14 HOV Reversible Lane Concept</p> <p>As noted previously by the California Department of Transportation (Caltrans) District 11 Management, the MTA is requesting to plan and construct reversible HOV lanes on the San Diego Freeway (SR-15) near the Los Angeles County/Fresno County area.</p> <p>For your request, the Department has provided the following page initial information about the project for your effective management of the facility for implementation of the reversible HOV lanes on State Route 15 (SR-15) that were proposed to the San Diego County Corridor (SDCC) Corridor Study. Since the Corridor Study is a technical, not planning, analysis, we recommend that the information be used as a reference in the final report and request that you, or if the reversible concept is studied further, have initial questions and comments be addressed to the appropriate engineering department.</p> <p>Once the Metro Board approves the final Corridor Study report, please provide our office with an SR-15 CD and the SR-15 road number of the document so that we may distribute to appropriate offices in the Department.</p> <p>If you have any questions, I can be reached at 213-997-0812.</p> <p>Attachment</p>	<p>State of California Department of Transportation</p> <p><b>Memorandum</b></p> <p>To: Brian Lee, Project Manager Metropolitan Transportation Authority (MTA)</p> <p>From: LARRY TAYLOR, MANAGER CHIEF DEPARTMENT OF TRANSPORTATION OFFICE OF HIGHWAY ENGINEERING &amp; FEASIBILITY STUDIES (HENS/FHS) CORRIDOR &amp; FEASIBILITY STUDIES OVERSIGHT MANAGER</p> <p>Subject: Assessment of SR-14 HOV Reversible Lane Concept</p> <p>As noted previously by the California Department of Transportation (Caltrans) District 11 Management, the MTA is requesting to plan and construct reversible HOV lanes on the San Diego Freeway (SR-15) near the Los Angeles County/Fresno County area.</p> <p>For your request, the Department has provided the following page initial information about the project for your effective management of the facility for implementation of the reversible HOV lanes on State Route 15 (SR-15) that were proposed to the San Diego County Corridor (SDCC) Corridor Study. Since the Corridor Study is a technical, not planning, analysis, we recommend that the information be used as a reference in the final report and request that you, or if the reversible concept is studied further, have initial questions and comments be addressed to the appropriate engineering department.</p> <p>Once the Metro Board approves the final Corridor Study report, please provide our office with an SR-15 CD and the SR-15 road number of the document so that we may distribute to appropriate offices in the Department.</p> <p>If you have any questions, I can be reached at 213-997-0812.</p> <p>Attachment</p>
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- High Desert Corridor freeway along Avenue P-8 between SR-14 and 50<sup>th</sup> Street East. This will address alternative alignments within the general vicinity of P-8, alternative lane configurations (three mixed flow lanes + HOV lane, four mixed flow lanes, three mixed flow lanes), alternative connections to SR-14 (e.g., freeway to freeway HOV ramp, no HOV ramp), alternative Palmdale Airport connections (freeway to arterial street,

freeway to freeway, alternative locations), non-standard and standard geometry.

### ***Environmental Documentation***

When funding becomes available, project implementation will require the preparation of an environmental document satisfying both California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) requirements based on the preliminary engineering plans. FHWA will be the lead agency to carry out the NEPA process and, at that time, all reasonable alternatives will be studied.

It is anticipated that the appropriate environmental document for short-range improvements on I-5 and SR-14 will be an Initial Study/Environmental Assessment (IS/EA). The level of impact for these projects (little or no right-of-way acquisition and no structure displacement, no biological species of concern, no cultural impacts, no public controversy) does not appear to warrant a more extensive Environmental Impact Report/Environmental Impact Statement (EIR/EIS). The environmental document will be prepared in conjunction with a proactive public involvement program to identify and incorporate public and agency concerns and issues related to the project.

For initial development of the High Desert Corridor (HDC), a more extensive environmental analysis and documentation is envisioned—either an EIR, assuming Joint Powers Authority or other local project initiative (similar to Orange County toll road development) or an EIR/EIS if state/federal financing is anticipated. In the case of Orange County toll road development, the project was environmentally cleared, right-of-way obtained and construction funded with local initiative, while Caltrans oversight of design and construction came near project completion.

### ***Project Implementation Schedule***

After environmental clearance is obtained, the project would proceed into the preparation of final engineering plans, specifications, and estimates. Due to the time needed to obtain funding and perform the environmental and engineering activities, construction of the short-range improvements is not anticipated to be completed until 2015. Funding constraints make it unlikely that the longer range I-5 and SR-14 corridor improvements will be completed until 2020 or 2025, while SR-138 corridor would be fully implemented after 2030 in Los Angeles County.



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### SELECTED REFERENCES (SEE REPORT DOCUMENTS FOR MORE COMPLETE LIST)

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## ***North County Corridors Study Milestone Deliverables***

### **Part I**

- Parsons Transportation Group, on behalf of the Los Angeles County Metropolitan Transportation Authority. *North County Corridor Study Part I, Scoping Plan and Community Outreach and Public Participation Plan*. October 2001.
- Parsons Transportation Group, on behalf of the Los Angeles County Metropolitan Transportation Authority. *North County Corridor Study Part I, Final Scoping Report*. February 8, 2002
- Parsons Transportation Group, on behalf of the Los Angeles County Metropolitan Transportation Authority. *North County Corridor Study Part I, Focus Group Findings*. February 8, 2002
- Parsons Transportation Group, on behalf of the Los Angeles County Metropolitan Transportation Authority. *North County Corridor Study Part I, Purpose and Need Report*. March 5, 2002.
- Parsons Transportation Group, on behalf of the Los Angeles County Metropolitan Transportation Authority. *North County Corridor Study Part I, Corridor Analysis Alternatives Evaluation Report. Volume 1*. July 30, 2002.

### **Part II**

- Parsons Transportation Group, on behalf of the Los Angeles County Metropolitan Transportation Authority. *SR-138 Study Community Outreach and Public Participation Plan*. July 2002.
- Parsons Transportation Group, on behalf of the Los Angeles County Metropolitan Transportation Authority. *SR-138 Study Purpose and Need Statement*. November 2002.
- Parsons Transportation Group, on behalf of the Los Angeles County Metropolitan Transportation Authority. *North County Corridor Study Part I, Corridor Analysis Alternatives Evaluation Report. Volume 2*. February 6, 2003.
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- The Robert Group, on behalf of the Los Angeles County Metropolitan Transportation Authority, *Public Outreach and Consensus Building Process Summary*. June 2004

### **Integration**

- Parsons Transportation Group, on behalf of the Los Angeles County Metropolitan Transportation Authority. *North County Corridors Study Financial Strategies for the Integrated I-5/SR-14/SR-138 Corridor Plan*. February 2003.

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**Acknowledgements and Thank You!**  
**To the many Individual and Agency Contributors to the Study**

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## North County Transportation Coalition Voting Members

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Rosa Fuquay – Supervisor Antonovich office

Connie Worden Roberts – Citizen appt.

Richard Yribe – County Public Works

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Frank Roberts – Mayor

David Ledbetter – Senior Planner

Ron Carter – Citizen appt.

### Palmdale

Jim Ledford – Mayor

John Brooks – Senior Analyst

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### Santa Clarita

Cameron Smyth – Councilman

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## Area Town Councils

Acton Town Council

Antelope Acres Town Council

Association of Rural Town Councils

Green Valley Town Council

Juniper Hills Town Council

Lake Los Angeles Town Council

Leona Valley Town Council

Littlerock Chamber of Commerce

Littlerock Town Council

Llano Community Association

Pearblossom Chamber of Commerce

Quartz Hill Town Council

Lakes Town Council

Sun Village Town Council

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### ***Wagner & Associates***

Stephanie Wagner

## **LIST OF ACRONYMS AND ABBREVIATIONS**

<b>AAA</b> —Automobile Club of Southern California	<b>NEPA</b> —National Environmental Protection Act
<b>AVAQMD</b> —Antelope Valley Air Quality Management District	<b>PDT</b> —Project Development Team
<b>AVBOT</b> —Antelope Valley Board of Trade	<b>POC</b> —Policy Oversight Committee
<b>Caltrans</b> —California Department of Transportation	<b>PSR/PDS</b> —Project Study Report/Project Development Support
<b>CHP</b> —California Highway Patrol	<b>PUD</b> —Planned Unit Development
<b>COG</b> —Council of Governments	<b>RSTIS</b> —Regionally Significant Transportation Investment Study
<b>FHWA/FTA</b> —Federal Highway Administration/Federal Transit Administration	<b>RTIP</b> —Regional Transportation Improvement Program
<b>HDC</b> —High Desert Corridor	<b>RTP</b> —Regional Transportation Plan
<b>HOV</b> —High Occupancy Vehicle	<b>SANBAG</b> —San Bernardino Association of Governments
<b>HSR</b> —High-Speed Rail	<b>SCAG</b> —Southern California Association of Governments
<b>ISTEA</b> —Intermodal Surface Transportation Efficiency Act	<b>SHOPP</b> —State Highway Operation and Protection Program
<b>ITIP</b> —Interregional Transportation Improvement Program	<b>SOV</b> —Single Occupant Vehicle
<b>ITS</b> —Intelligent Transportation Systems	<b>TAC</b> —Technical Advisory Committee
<b>JPA</b> —Joint Powers Authority	<b>TEA-21</b> —Transportation Equity Act for the 21st Century
<b>LACMTA (or MTA)</b> —Los Angeles County Metropolitan Transportation Authority	<b>TCR</b> —Transportation Corridor Report
<b>LADOT</b> —City of Los Angeles Department of Transportation	<b>TDM</b> —Transportation Demand Management
<b>LAWA</b> —City of Los Angeles World Airports	<b>TIFIA</b> —Transportation Infrastructure Finance and Innovation Act
<b>LCNO</b> —Lancaster Coalition of Neighborhood Organizations	<b>TSM</b> —Transportation Systems Management
<b>LPS</b> —Locally Preferred Strategy	<b>TUMF</b> —Transportation Uniform Mitigation Fee
<b>NCTC</b> —North County Transportation Coalition	<b>USDOT</b> —United States Department of Transportation
<b>MIS</b> —Major Investment Study	<b>VIA</b> —Valley Industrial Association
<b>MPO</b> —Metropolitan Planning Organization	







# CITY OF PALMDALE

CITY OF PALMDALE

COUNTY OF LOS ANGELES, CALIFORNIA

RESOLUTION NO. CC 2004-006

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE SUPPORTING THE ALIGNMENT OF THE CALIFORNIA HIGH SPEED RAIL ROUTE THROUGH THE ANTELOPE VALLEY.

WHEREAS, the California High Speed Rail Authority has been designated by the California State Legislature to design, plan and construct a High Speed Rail line that will connect the northern and southern ends of the state; and

WHEREAS, the California Legislature by enacting AB 971 envisioned a high speed rail service that would provide maximum convenience to populated areas in the Antelope and San Joaquin Valleys as well as major communities in the Los Angeles, Fresno, Bay Area/Sacramento Corridor; and

WHEREAS, subsequent extensive and costly publicly-funded studies have concurred that the most practical route for a new high speed rail line connecting both ends of California will pass through the populated areas of the Antelope Valley, which has been identified as the one of the highest growth areas of the State; and

WHEREAS, a major need and purpose of the High Speed Ground Transportation System for travelers is to move people to and from mid-line cities to end points and back and not only to connect the end line cities that already enjoy fast, economical and frequent air service; and

WHEREAS, adoption of a route through the Antelope Valley will help ensure a higher ridership for the high speed rail service while adding approximately six to nine (6-9) minutes to the Los Angeles-Bay Area trip; and

WHEREAS, fast and convenient access to the new Palmdale Regional Airport by high speed service is essential to maximize the public benefits of convenient transfers between the airport and the rail network; and

WHEREAS, the California Transportation Commission, and rail studies have determined that the new high speed rail system must be able to move both passengers and much freight now carried in trucks and containers on our crowded highways in order to reduce traffic congestion, and reduce air pollution to meet federal mandates; and

WHEREAS, a high speed rail route passing from the Los Angeles area through the Antelope Valley, stopping at the Palmdale Regional Airport, thence northward to Bakersfield and Fresno to the Bay area will serve all the people of California better than any other alternative alignment.

NOW, THEREFORE, BE IT RESOLVED that the City of Palmdale does hereby support the Antelope Valley route, and hereby urges the Governor, the Legislature, and the High Speed Rail Authority to formally adopt the Antelope Valley Route herein proposed as the final route chosen by the California High Speed Rail Authority.

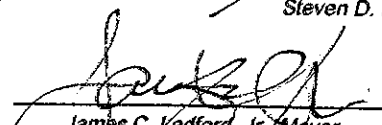
PASSED, APPROVED and ADOPTED this 24<sup>th</sup> day of March 2004.

  
Richard J. Loa, Councilmember

  
James A. "Jim" Root, Mayor Pro Tem

  
Mike Dispenza, Councilmember

  
Steven D. Hofbauer, Councilmember

  
James C. Ledford, Jr., Mayor

MOTION BY SUPERVISOR MICHAEL D. ANTONOVICH, MAYOR FRANK ROBERTS  
AND COUNCILMAN ANTONIO VILLARAIGOSA

MARCH 18, 2004

The High Speed Rail Antelope Valley Alignment, together with the Palmdale Station, will provide high-speed passenger service to 700,000 more people and 270,000 more jobs than the proposed route directly from Bakersfield to Los Angeles through the Grapevine Pass. According to the Southern California Association of Governments, Northern Los Angeles County will experience one of the largest increases in population during the next 25 years. Palmdale and the surrounding communities have one of the fastest growth rates in the State of California. It is essential that this region be included in the High Speed Rail route in order to accommodate this growing population. Providing High Speed Rail service to the Antelope Valley rather than through the Grapevine Pass will increase economic benefit for the region and also for the State of California as a whole. The net economic benefit for the State of California with the Antelope Valley alignment is estimated at \$855 million.

According to the Los Angeles Economic Development Corporation, there is a continuing need for industrial space in the County of Los Angeles, the lack of which will lead to significant economic losses for the region. In order to avoid the loss of the County's tax base, it is essential that the high speed rail alignment be placed through this growing portion of the County of Los Angeles. The High Speed Rail Antelope Valley Alignment will provide transportation incentives necessary to attract industries to one of the few places in the County of Los Angeles that can sustain residential and

- M O R E -

- P A G E 2 -

industrial development. The High Speed Rail Antelope Valley Alignment will also provide the backbone for the transportation improvements necessary to attract airlines to the Palmdale Airport.

I, THEREFORE, MOVE THAT THE BOARD OF SUPERVISORS:

1. Support the High Speed Rail Antelope Valley Alignment and the Palmdale Station; and
2. Forward a copy of this motion to the High Speed Rail Authority.

# # #

MDA:rhc

AGN. NO. \_\_\_\_7\_\_\_\_

MOTION BY SUPERVISOR MICHAEL D. ANTONOVICH

JANUARY 27, 2004

The High Speed Rail Antelope Valley Alignment, together with the Palmdale Station, will provide high-speed passenger service to 700,000 more people and 270,000 more jobs than the proposed route directly from Bakersfield to Los Angeles through the Grapevine Pass. According to the Southern California Association of Governments, Northern Los Angeles County will experience one of the largest increases in population during the next 25 years. Palmdale and the surrounding communities have one of the fastest growth rates in the State of California. It is essential that this region be included in the High Speed Rail route in order to accommodate this growing population. Providing High Speed Rail service to the Antelope Valley rather than through the Grapevine Pass will increase economic benefit

- M O R E -

MOTION

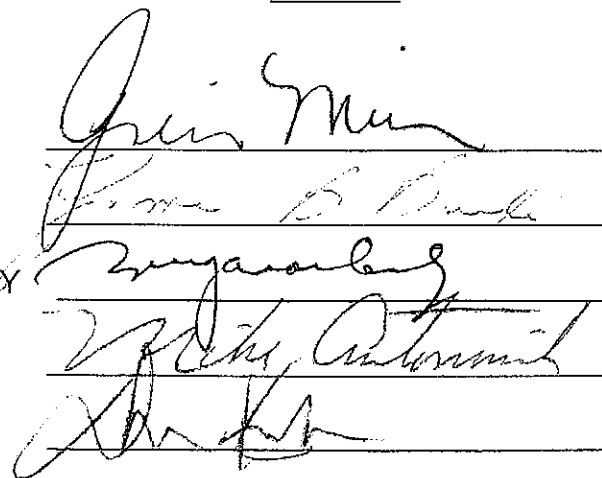
MOLINA

BURKE

YAROSLAVSKY

ANTONOVICH

KNABE



for the region and also for the State of California as a whole. The net economic benefit for the State of California with the Antelope Valley alignment is estimated at \$855 million.

According to the Los Angeles Economic Development Corporation, there is a continuing need for industrial space in the County of Los Angeles, the lack of which will lead to significant economic losses for the region. In order to avoid the loss of the County's tax base, it is essential that the high speed rail alignment be placed through this growing portion of the County of Los Angeles. The High Speed Rail Antelope Valley Alignment will provide transportation incentives necessary to attract industries to one of the few places in the County of Los Angeles that can sustain residential and industrial development. The High Speed Rail Antelope Valley Alignment will also provide the backbone for the transportation improvements necessary to attract airlines to the Palmdale Airport.

**I, THEREFORE, MOVE THAT THE BOARD OF SUPERVISORS:**

1. Support the High Speed Rail Antelope Valley Alignment and the Palmdale Station; and
2. Forward a copy of this motion to the High Speed Rail Authority.

MDA:rfc

## **RESOLUTION # 96-357-1 - B**

### **RESOLUTION OF THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS SUPPORTING AND URGING ADOPTION OF THE ANTELOPE AND SAN JOAQUIN VALLEYS HIGH SPEED RAIL ROUTE**

**WHEREAS**, the Southern California Association of Governments (SCAG) is a Joint Powers Agency established pursuant to Sections 6502 et seq. of the California Government Code; and

**WHEREAS**, pursuant to Section 130004 of the California Public Utilities Code, SCAG is the designated Regional Transportation Planning Agency and as such is responsible for preparing both the Regional Transportation Plan and the Regional Transportation Improvement Program under Sections 65080 et seq. of the California Government Code; and

**WHEREAS**, SCAG is the designated Metropolitan Planning Organization (MPO) for the Counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura, and as such is mandated by 23 U.S.C. §134(g)-(h), 49 U.S.C. §5303 et seq., 23 C.F.R. §450, and 49 C.F.R. §613 to maintain a continuing, cooperative, and comprehensive transportation planning process resulting in a Regional Transportation Plan and a Regional Transportation Improvement Program; and

**WHEREAS**, as the designated MPO, SCAG is responsible pursuant to 23 U.S.C. §134(a) for conducting a continuing, cooperative, and comprehensive transportation planning process for the above area in such a way as to efficiently maximize mobility of people and goods within and through urbanized areas while minimizing transportation-related fuel consumption and air pollution; and

**WHEREAS**, as the designated MPO, SCAG is responsible pursuant to 23 U.S.C. §134(f)(2) and 23 C.F.R. §450.316(a)(2) for considering the consistency of transportation planning with applicable Federal, State, and local energy conservation programs, goals, and objectives; and

**WHEREAS**, as the designated MPO, SCAG is required, pursuant to 23 U.S.C. §134(f)(14) and 23 C.F.R. §450.316(a)(14), to consider methods to expand and enhance transit services and to increase the use of such services; and

**WHEREAS**, Section 14035.6(a) and (b) of the California Government Code require the State Department of Transportation to appoint an advisory committee for purposes of conducting a feasibility study for developing an integrated high-speed ground transportation system in California; and

**WHEREAS**, pursuant to Section 14035.6(d)(3) of the California Government Code, one member of this committee must be a representative from the Southern California Association of

Governments; and

**WHEREAS**, the Antelope and San Joaquin Valleys High Speed Railway Alliance has been formed with the purpose of working to assure that the new California High Speed Ground Transportation System now being planned at the direction of the State Legislature will result in a High Speed Rail line that provides maximum convenience to populated areas in the Antelope and San Joaquin Valleys as well as major communities at the northern and southern ends of the State; and

**WHEREAS**, the California Legislature by enacting AB 971 specified that the Los Angeles, Fresno, Bay Area / Sacramento Corridor be created and a new railway alignment be established through and across the Tehachapi mountains that separate the San Joaquin and Antelope Valleys and their population center, and also suggested such other new rail routes as are necessary elsewhere; and

**WHEREAS**, subsequent extensive and costly publicly-funded studies have concurred that the most practical route for a new high-speed rail line connecting both ends of California will pass through the populated areas of the Antelope and San Joaquin Valleys, both of which have been identified as the highest growth areas of the State; and

**WHEREAS**, the primary need and purpose of the High Speed Ground Transportation System for travelers is to move people to and from mid-line cities to end points and back and not mainly to connect the end line cities that already enjoy fast, economical and frequent air service; and

**WHEREAS**, fast and convenient access to the new Palmdale-Lancaster International Airport by high-speed rail service is essential to maximize the public benefits of convenient transfers between the airport and the rail network; and

**WHEREAS**, the California Transportation Commission and rail studies have determined that the new high-speed rail system must be able to move both passengers and much freight now carried in trucks and containers on our crowded highways in order to reduce traffic congestion, and reduce air pollution to meet Federal mandates; and

**WHEREAS**, a high-speed rail route passing from the Los Angeles area through the Lancaster-Palmdale International Airport and thence northward to Bakersfield and Fresno to the Bay Area and Sacramento will serve all of the people of California better than any other alternative alignment;

**NOW, THEREFORE BE IT RESOLVED** that SCAG does hereby join with the Antelope and San Joaquin Valleys High Speed Railway Alliance in supporting the Antelope and San Joaquin Valley route, and hereby urges the Governor, the Legislature, and the Very High Speed Ground Transportation Commission created by SCR 6 to formally adopt the route herein proposed.

Approved by the Regional Council of the Southern California Association of Governments at a

regular meeting on this 7th day of December, 1995.

Bob Buster

**BOB BUSTER, SCAG PRESIDENT**  
Member, Board of Supervisors,  
County of Riverside

Attest:

Mark A. Pisano

**MARK A. PISANO, SCAG EXECUTIVE DIRECTOR**

Approved as to Form:

Helene V. Smookler

**HELENE V. SMOOKLER**  
**SCAG LEGAL COUNSEL**



RESOLUTION NO. 03-440

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF  
LANCASTER, CALIFORNIA, SUPPORTING AN ANTELOPE  
VALLEY HIGH SPEED RAIL ALIGNMENT AND STATION  
LOCATION

WHEREAS, the California High Speed Rail Authority (CHSRA) has been designated by the California State Legislature to design, plan and construct a High Speed Rail line that will connect the northern and southern ends of the state; and

WHEREAS, the California Legislature by enacting AB 971 envisioned a high speed rail service that would provide maximum convenience to populated areas in the Antelope and San Joaquin Valleys as well as major communities in the Los Angeles, Fresno, Bay Area/Sacramento Corridor; and

WHEREAS, subsequent extensive and costly publicly-funded studies have concurred that the most practical route for a new high speed rail line connecting both ends of California will pass through the populated areas of the Antelope Valley, which has been identified as one of the highest growth areas of the State; and

WHEREAS, a major need and purpose of the High Speed Ground Transportation System for travelers is to move people to and from mid-line cities to end points and back and not only to connect the end line cities that already enjoy fast, economical and frequent air service; and

WHEREAS, adoption of a route through the Antelope Valley will help ensure a higher ridership for the high speed rail service while adding only about six to nine (6-9) minutes to the Los Angeles Bay Area trip; and

WHEREAS, the California Transportation Commission and rail studies have determined that the new high speed rail system must be able to move both passengers and freight now carried in trucks and containers on our crowded highways in order to reduce traffic congestion, and reduce air pollution to meet federal mandates, and

WHEREAS, a high speed rail route passing from the Los Angeles area through the Antelope Valley, stopping in the Antelope Valley, thence northward to Bakersfield and Fresno to the Bay area will serve all people of California better than any other alternative alignment;

NOW, THEREFORE, BE IT RESOLVED that the City of Lancaster does hereby support the Antelope Valley route, and hereby urges the Governor, the Legislature, and the High Speed Rail Authority to formally adopt the Antelope Valley Route as the final route chosen by the California High Speed Rail Authority.

PASSED, APPROVED, and ADOPTED this 12th day of November, 2003, by  
the following vote:

AYES: Council Members: Jeffra, Sileo, Visokey, Vice Mayor Hearn, Mayor Roberts

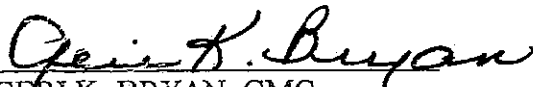
NOES: None


ABSTAIN: None

ABSENT: None

ATTEST:

APPROVED:

  
GERI K. BRYAN, CMC  
City Clerk  
City of Lancaster

  
FRANK C. ROBERTS, Mayor  
City of Lancaster

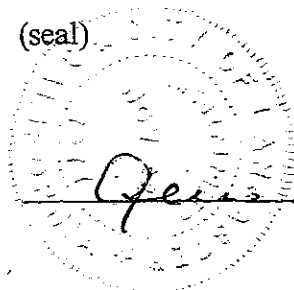
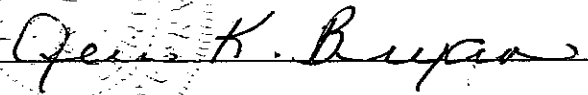
STATE OF CALIFORNIA                    )  
COUNTY OF LOS ANGELES            ) ss  
CITY OF LANCASTER                    )

CERTIFICATION OF RESOLUTION  
CITY COUNCIL

I, Geri Bryan, City Clerk City of Lancaster, CA, do  
hereby certify that this is a true and correct copy of the original Resolution No. 03-440, for which  
the original is on file in my office.

WITNESS MY HAND AND THE SEAL OF THE CITY OF LANCASTER, on this 7th  
day of April, 2004.

(seal)

FOR IMMEDIATE RELEASE  
April 13, 2004

CONTACT: John Brooks, City of Palmdale  
(661) 267-5132  
Dan Hilley or Alan Maltun  
(213) 630-6550

*Palmdale, L.A. Support Antelope Valley Route*

**New Tunneling Study Shows Bullet Train Route Through Grapevine  
Poses Greater Earthquake Hazard, Costs More**

Los Angeles, Calif. – April 13, 2004 -- Citing an engineering study released today and other data Palmdale Mayor James C. Ledford Jr. testified at a hearing here today that routing a proposed bullet train through the Antelope Valley would be safer from earthquake hazards and far better serve Southern California's transportation needs than an alternative route also being considered by the California High Speed Rail Authority (CHSRA).

"The Antelope Valley Route is cheaper, faster (to construct) and safer to build," Ledford told Authority members at a hearing on the project's Draft Environmental Impact Report (DEIR). "The right route choice is critical for California to meet statewide and regional transportation and air quality needs, to generate jobs and promote economic growth in a fiscally and socially responsible way."

The CHSRA has proposed a high-speed train that would whisk passengers from the Bay Area to Los Angeles in about 2.5 hours. The project would cost an estimated \$35 billion and be the most expensive public works project in U.S. history. Present plans call for Bakersfield to be the last Central Valley station before Southern California. The train then would either follow a route through the Antelope Valley, with a stops in Palmdale and Sylmar, or down the Grapevine Route along the I-5 Freeway and stop in Sylmar before proceeding to Union Station downtown. The Palmdale to Union Station trip would take about 26 minutes.

### ***Study Cites Poor Tunneling Conditions and Earthquake Risk on Grapevine (I-5) Route***

An analysis conducted for Palmdale by GEODATA, an Italian engineering firm specializing in tunneling, found that the Antelope Valley Route would involve safer and less extensive tunneling, lower total construction costs with less risk of cost overrun and costly delay, and significantly lower risk of catastrophic accidents affecting rail passengers and crews after service has commenced, according to testimony by Robert Schaevitz, a consultant who participated in the tunneling study. The Grapevine Route would run within a mile of the San Gabriel earthquake fault for over 20 miles, greatly increasing tunneling costs and the likelihood of construction accidents and delay. Because earthquake hazards are significantly lower on the Antelope Valley Route, construction time is expected to be half that of the Grapevine Route, and construction costs (including non-tunnel portions of the routes) could be as much as 60 percent (\$775 million) less.

“The I-5 route is truly an accident waiting to happen,” said Schaevitz, adding that the Grapevine route would tunnel right through the San Gabriel fault at several locations. “Given how often earthquakes occur in this region, it is difficult to comprehend why the Authority would even consider this route.”

### ***Experts Testify that AV Route Serves More Residents and Businesses***

Although the Antelope Valley Route would add six to nine minutes to the Bay Area-Los Angeles trip, it would serve 750,000 more residents and 260,000 more employees than the virtually unpopulated Grapevine route, and generate greater ridership revenues, resulting in \$900 million in net benefits over the first 33 years of operation.

“More riders will use it if it goes where the people are,” Ledford told CHSRA members. “More riders mean higher revenue, which is better for California taxpayers. Serving

more people and generating more revenue are benefits well worth a few extra minutes of travel time." Ledford added that a Palmdale stop would connect Southland and San Joaquin Valley residents and businesses to the Palmdale Airport, which is expected to become a major southland airport that would relieve congestion at Los Angeles International and other airports in the region.

***AV Route to Reduce Congestion on Southland Freeways and Airports***

Ledford noted that in addition to linking the area's airports, the Antelope Valley Route would benefit the entire Southern California region by relieving congestion on the I-5 and SR 14 Freeways. "If we are to get cars off the road, we have to go where the people go," Ledford said. A study conducted for the Southern California Association of Governments projected that high-speed train service between Palmdale and downtown would reach 96,000 to 122,000 daily trips, the majority of which would occur during peak commuter hours.

In addition to Palmdale and Lancaster, the Antelope Valley Route is supported by a wide range of elected officials and public agencies, including Congressman Bill Thomas, Congressman Buck McKeon and Congressman Calvin Dooley; the Mayor and the City Council of Los Angeles and the Board of Supervisors of the County of Los Angeles; the Los Angeles County Metropolitan Transportation Authority; and Los Angeles World Airports.

###

# **A Comparative Analysis of Tunnel Construction Times, Costs, and Risks Associated with the Choice of High-Speed Rail Alignment Between Los Angeles and Bakersfield**

## **Executive Summary**

### **Background**

The California High-Speed Rail Authority has proposed development of a statewide high-speed train system (HST) connecting southern and northern California. An HST must pass the Tehachapi Mountain Range north of Los Angeles, an area of steep terrain and complex geology that is crossed by several active earthquake faults. In addition to geological conditions, the choice of route through this region must take into account length, grade, ventilation, safety, surface access, and environmental impact.

The Authority has considered two corridors for crossing the Tehachapi Mountains between downtown Los Angeles and Bakersfield – an alignment generally following I-5 freeway over the Grapevine ("I-5 alignment"), and one through the Antelope Valley ("Antelope Valley alignment"), generally following highways I-5, SR-14, and SR-58.

The City of Palmdale commissioned a study to investigate tunneling-related risks and their potential effect on high-speed rail project cost and schedule and to identify the best route alignment through the Tehachapi Mountains with respect to minimizing capital cost, risk of construction cost overrun, and project delay. The study was conducted by Geodata S.p.A. of Turin, Italy; Transmetrics Inc. of Campbell, California; and HLB Decision Economics Inc., of Silver Spring, Maryland.

The study employed a multi-criteria analysis process, taking into account a number of key factors: total construction cost and risk of cost overruns; construction duration and the risk of delays; performance of alignment alternative in dealing with risks during operation; environmental impact; and capital investment and the related financial risks.

### **Tunneling Risk Analysis**

Consistent with the tunnel options analysis conducted by the Authority, this study considered two alignment alternatives, each with two maximum permitted grades (2.5% and 3.5%). A number of specific findings resulted from the tunneling study:

1. Although the total lengths of tunneling involved in both the I-5 and the Antelope Valley alignments are extensive, the **ground conditions along the Antelope Valley are significantly more favorable than those along the I-5 alignment**, and thus would involve **materially less construction, financial, and contractual risk**.
2. For both the 3.5% and 2.5% maximum grade options, **the average construction time required for the I-5 alignment is almost twice that required for the Antelope Valley alignment** (2,218 working days versus 1,125 working days, respectively).

3. **The Antelope Valley alignment is about 40% less expensive than the I-5 alignment under 3.5% maximum grade option, and 15% less expensive under the 2.5% maximum grade option, again due to increased total length of the tunneling.**
4. **The cost and time (delay) variations for the Antelope Valley alignment are much tighter than those of the I-5 alignment, implying that uncertainty associated with I-5 alignment is much higher than with the Antelope Valley alignment.**
5. **The Antelope Valley alignment has an extremely "slim" variation in potential cost, with quite small differences between the projected maximum and minimum values. The results are much more uncertain for the I-5 alignment, with very large differences between the maximum and minimum values.**

### **Economic Risk and Benefit/Cost Analysis**

The study included an economic risk analysis of the two alignment alternatives based on the results of the tunneling analysis reported in the preceding section. This work included a separate computer simulation of cost and schedule risk scenarios and a combined economic benefit/cost assessment of the project. Three risk factors were considered: tunneling and geological risk (derived from the technical analysis); cost escalation risk (increases resulting from unforeseen schedule slippage); and financial costs of delay (not considered in the technical analysis).

The principal results of this analysis were:

**Construction Cost.** The construction cost risk of the Antelope Valley alignment ranged from \$347 million to \$775 million less than I-5 alignment, depending on assumptions used. The average difference was \$543 million.

**Construction Time.** Years to complete the Antelope Valley alignment ranged from 1.8 years to 6.2 years less than the I-5 alignment, with an average difference of 3.7 years.

**Ridership.** The analysis indicates that the additional ridership generated by access to the Antelope Valley would more than offset the slightly shorter (6-9 minutes) end-to-end journey time along the I-5 alignment. **Total cumulative 33-year life-cycle intercity ridership under the Antelope Valley alternative would exceed that under the I-5 option by over 3 percent. Adding commuter ridership would more than double this difference.**

**Economic Integration.** Due to the added accessibility afforded by the Antelope Valley alignment, this option would provide better intermodal connectivity and industrial agglomeration, which creates wealth and improved living standards at a regional scale. **The estimated value of economic impact associated with the Antelope Valley alignment is \$540 to \$818 million over the initial 33-year project life cycle.**

**Economic Viability (Benefit/Cost).** Benefits of the HST would take the form of travel time savings, vehicle operating cost saving, reduced accident-related costs; and diminished emissions of air pollutants and greenhouse gases. **Over the first 33 years of operation, an HST employing the Antelope Valley alignment would generate approximately \$900 million more in net benefits than under the I-5 alternative.**

**Total Economic Impact.** The total economic impact associated with the Antelope Valley alignment over a period of 30 years could reach \$3.1 billion, with an expected 38,000 additional jobs and over \$2 billion in earnings. The investment would result in attracting about 17,000 new households to the Antelope Valley region, rather than to other locations in already crowded southern California areas.

### **Technical Note**

A sophisticated computer modeling system – Decision Aids in Tunneling, or *DAT* – was used to assess the potential costs and risks of the two alignments. *DAT* has been developed over more than 20 years by a cooperative group, including MIT and EPFL (École Polytechnique Fédérale de Lausanne), with the participation of the US National Science Foundation, the Swiss Federal Office for Transportation, the Swiss Science Foundation, and Geodata SpA.

### **Study Team**

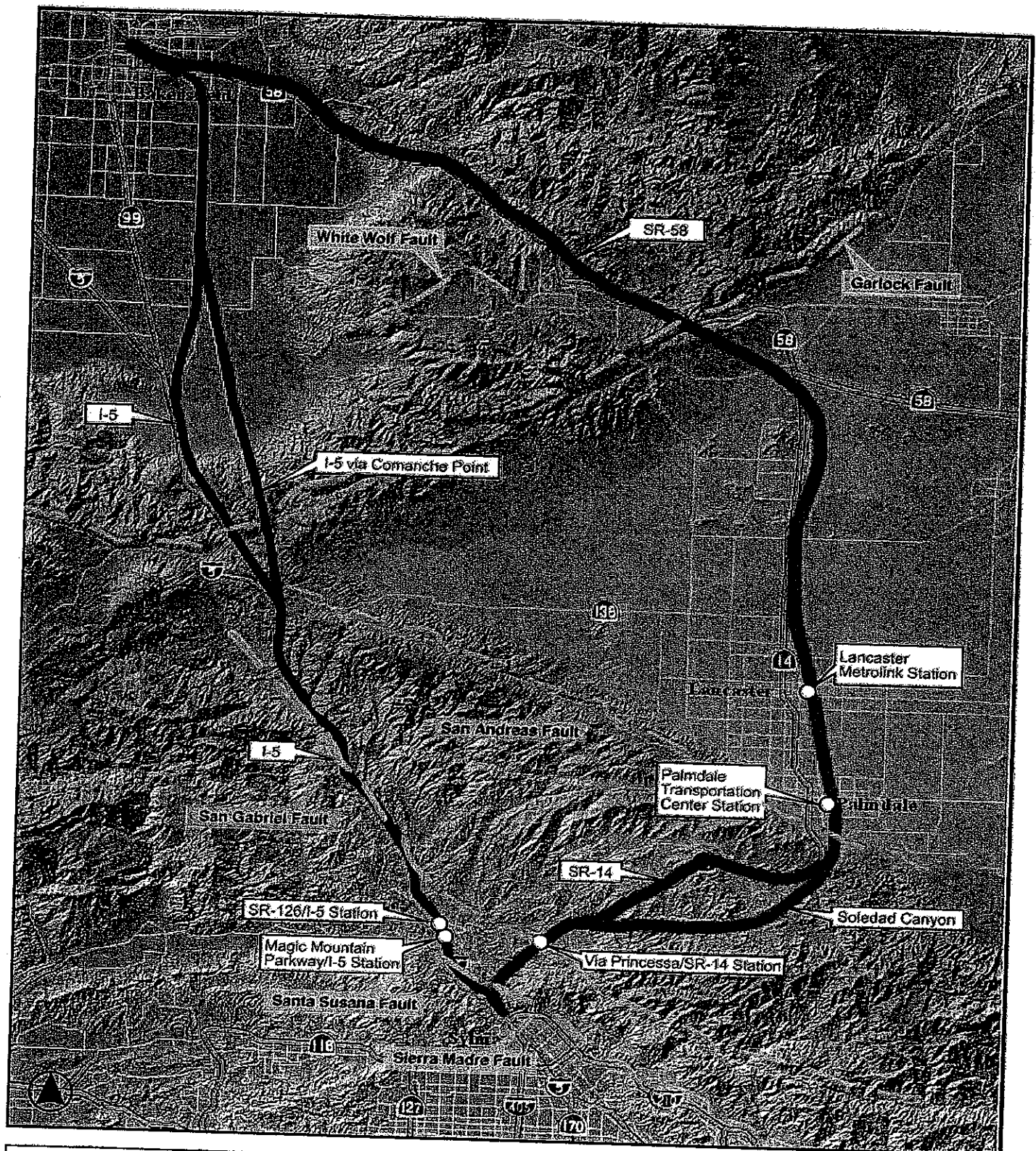
- **Geodata** is a geo-engineering company with particular expertise in the design of underground structures in complex and difficult ground conditions. Since its beginning in 1984, Geodata's activities have involved lab and in-situ characterization, feasibility study, preliminary design, final design, performance monitoring, design optimization during construction, resident engineering, and independent design checks for over 1500 km of tunnels for transportation, water supply, and sewage disposal.
- **HLB** offers services in the areas of transportation economics and policy, and risk analysis consulting to government and industry throughout North America. HLB has conducted numerous feasibility and risk analysis studies, including multiple studies for the Federal Railroad Administration to assess rail project feasibility in over ten states nationwide, as well as major investment studies for large capital projects.
- **Transmetrics**, a certified MBE/DBE, is an international civil engineering firm providing engineering, transportation planning, and construction management services to public and private sector clients.

CONTACT: John Brooks, City of Palmdale  
(661) 267-5132  
Dan Hilley or Alan Maltun  
(213) 630-6550

###



# Antelope Valley Alignment: Best Choice for California



**Antelope Valley Alignment**  
**I-5/Grapevine Alignment**  
Faults